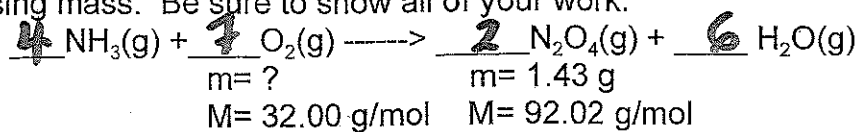


1. Using the following unbalanced equation and information below it, find the missing mass. Be sure to show all of your work.

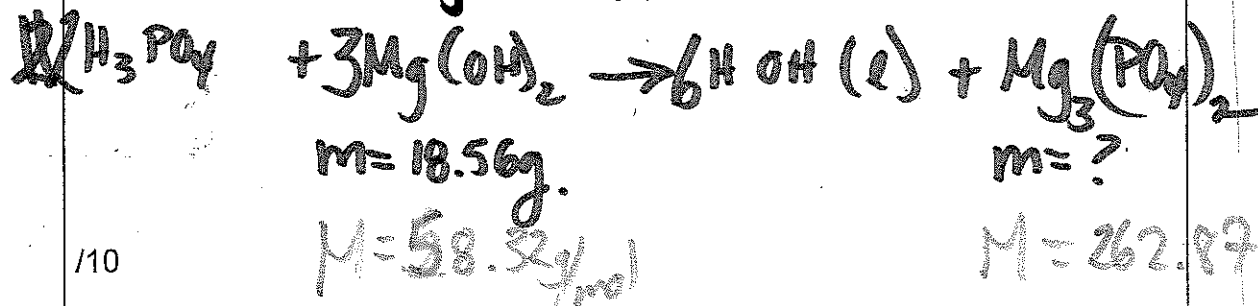


/5

$$n = \frac{1.43 \text{ g}}{92.02 \text{ g/mol}} = 0.016 \text{ mol} \times \frac{7}{2} = 0.054 \text{ mol} \times 32.00 \text{ g/mol} = 1.74$$

2. How many grams of magnesium phosphate will be produced when 18.56 grams of magnesium hydroxide reacts with phosphoric acid?

Phosphoric acid + magnesium hydroxide \rightarrow _____ + _____



/10

$$n = \frac{18.56 \text{ g}}{58.32 \text{ g/mol}} = 0.32 \text{ mol} \times \frac{1}{3} = 0.11 \text{ mol}$$

$$n = \frac{m}{M}$$

$$0.11 \text{ mol} = \frac{m}{262.87}$$

$$28.92 \text{ g} = m$$